

# Example of using mshell v.1.4.1 to work with LaTeX

Art2Dec SoftLab

Wednesday 19<sup>th</sup> November, 2025

$$f^{(n)}(z_0) = \frac{n!}{2\pi i} \oint_C \frac{f(z)}{(z-z_0)^{n+1}} dz$$

This formula is an example of using mshell v.1.4.1 to create article.

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

This formula is an example of using mshell v.1.4.1 to create article.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

This formula is an example of using mshell v.1.4.1 to create article.

$$\oint_L \vec{E} \cdot d\vec{l} = - \int_S \frac{\partial \vec{E}}{\partial t} \cdot d\vec{S}$$

This formula is an example of using mshell v.1.4.1 to create article.

$$E = mc^2$$

This formula is an example of using mshell v.1.4.1 to create article. This is the mass-energy equivalence formula, which states that energy (E) equals mass (m) multiplied by the speed of light (c) squared. It shows that mass and energy are interchangeable.

**latex1.ms:**

```
#!/bin/mshell
cd /home/igor/latexarticle

echo "formula1.jpg" | ollama2exec "recognize mathematical formula, convert it
to LaTeX file format and save it to file at current directory like formula1.tex
with bash script. dont create complete LaTeX file but just only part for formula"

echo "formula2.jpg" | ollama2exec "recognize mathematical formula, convert it
to LaTeX file format and save it to file at current directory like formula2.tex
with bash script. dont create complete LaTeX file but just only part for formula"

echo "formula3.jpg" | ollama2exec "recognize mathematical formula, convert it
to LaTeX file format and save it to file at current directory like formula3.tex
with bash script. dont create complete LaTeX file but just only part for formula"

echo "formula4.jpg" | ollama2exec "recognize mathematical formula, convert it
to LaTeX file format and save it to file at current directory like formula4.tex
with bash script. dont create complete LaTeX file but just only part for formula"

echo "----- All tex files -----"
ls *tex
echo "-----"
```

**latex1inter.ms:**

```
#!/bin/mshell
cd /home/igor/latexarticle

echo "https://www.shutterstock.com/shutterstock/photos/2306560875/display_1500/
stock-vector-generalisation-of-cauchy-s-integral-formula-math-vector-
illustration-2306560875.jpg" | ollama2exec "recognize mathematical formula,
convert it to LaTeX file format and save it to file at current directory like
formula1.tex with bash script. dont create complete LaTeX file but just only
part for formula"

echo "https://www.shutterstock.com/shutterstock/photos/2646217389/display_1500/
stock-vector-mathematical-formula-for-the-distance-between-two-points
-analytical-geometry-point-coordinates-2646217389.jpg" | ollama2exec
"recognize mathematical formula, convert it to LaTeX file format and save it
to file at current directory like formula2.tex with bash script. dont create
complete LaTeX file but just only part for formula"

echo "https://st2.depositphotos.com/18469382/48345/v/450/depositphotos_483456840
-stock-illustration-quadratic-equation-white-background.jpg" | ollama2exec
"recognize mathematical formula, convert it to LaTeX file format and save it
to file at current directory like formula3.tex with bash script. dont create
```

complete LaTeX file but just only part for formula. dont use unicode characters for formatting."

```
if [ -f formula3.tex ]
then
  echo "File exists"
else
  echo "https://st2.depositphotos.com/18469382/48345/v/450/depositphotos_
483456840-stock-illustration-quadratic-equation-white-background.jpg" |
ollama2exec "recognize mathematical formula, convert it to LaTeX file
format and save it to file at current directory like formula3.tex with
bash script. dont create complete LaTeX file but just only part for
formula. dont use unicode characters for formatting."
fi
```

```
echo "https://studfile.net/html/2706/358/html_xuDqH2J5HC.ct8W/img-MGzcggn.png"
| ollama2exec "recognize mathematical formula, convert it to LaTeX file
format and save it to file at current directory like formula4.tex with bash
script. dont create complete LaTeX file but just only part for formula. dont
use unicode characters for formatting."
```

```
echo "----- All tex files -----"
ls *tex
echo "-----"
```

### latex2.ms:

```
#!/bin/mshell
cd /home/igor/latexarticle
rm page*
ls *tex
echo "-----"
```

ollama3exec "create empty LaTeX page.tex file at current directory. No use any unicode charecters inside LaTeX code. Insert at page.tex file the name of article 'Example of using mshell v.1.4.1 to work with LaTeX' and name of author "Art2Dec SoftLab" and current data also. Don't use headers or footers for pages, numerate each page on right top. Use /obeylines before each new formula for new line. Insert code from all formula\*.tex files at current directory inside page.tex file. Like last formula add formula of mass-energy equivalence and at description write what it means with the same formatting like other formulas. Center all formulas only. Dont use italics anywhere except in formulas. After each formula describe at new paragraph that this formula is an example of using mshell v.1.4.1 to create article. At the end on new page put content of scripts latex1.ms, latex1inter.ms and latex2.ms like new paragraphs inside page.tex Before these scripts put their names. Attention: Reformat all scripts to fit the article page size Use correct size of fonts for name, author, add date then compile it with command pdflatex page.tex and start viewing page.pdf with command xdg-open page.pdf

No using while, for, if operations and redirection operations inside bash script"